CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley DPCC Meeting | October 31, 2013

West Coast States and British Columbia to Link Climate Policies



an agreement announced Monday, the governors California, Oregon, and Washington and the environment minister of British Columbia, Mary Polak, will place a price on greenhouse gas pollution and mandate the use of cleaner-burning fuels. Polak and Governors Jerry Brown, John Kitzhaber, and Jay Inslee gathered in San Francisco to fight climate change and stimulate clean-energy а economy in the region, which has a combined gross domestic product of \$2.8 trillion. The deal stems from the work of the Pacific Coast Collaborative, a group that advocates for climate change clean and energy policies. California and British Columbia have already placed a greenhouse price on gas emissions—through cap-andtrade and a carbon tax, adopted respectively—and clean fuel standards. Under the terms of the agreement, the governors of Oregon Washington committing are their states to move forward with similar policies. "We are the first generation to feel the sting of climate change and we are the last generation who can do something about it," said WA Governor Inslee. (Associated Press)

How Sandy Morphed from "Boring" to Killer Superstorm

One year ago, Hurricane Sandy flooded New Jersey and New York, dropped three feet of snow in West Virginia, and churned 20-foot waves on the Great Lakes. It caused at least 182 deaths and \$65 billion in damage, making it the second costliest weather disaster in U.S. history behind only Katrina. A September study by NOAA found that sea level rise triggered by climate change is making Sandy-type flooding more likely. For example, the flooding that swamped Sandy Hook, New Jersey would have been considered a once-in-435-year event in 1950, but it is now a once-in-295-year event and could become a once-in-20-year event by 2100. In the past century, sea level in the New York region has risen about a foot, two-thirds of it caused by man-made climate change, said Princeton professor Michael Oppenheimer. Fifty thousand people suffered Sandy flooding that wouldn't have happened if not for climate change, he added. NASA climatologist Cynthia Rosenzweig said cities around the world are learning from New York's experience and preparing for flooding worsened by climate change and sea level rise. (CBS News)

Higher Mercury Levels in Fish Linked to Warming Waters

A study published in the journal *PLoS One* has found that as climate change increases water temperatures, fish at the bottom of the food chain may absorb higher levels of methylmercury and pass it on to larger predator fish. Methylmercury is a neurotoxin linked to high blood pressure, kidney disease, and heart attacks in adults and slow neuro-behavioral development in children. Each year, a thousand tons of mercury drop into the oceans from power plant emissions and over 250 tons pour into various waters as a result of deforestation. Bacteria in aquatic systems convert mercury into methylmercury, and methylmercury's concentration in the food chain gradually increases as predators absorb the toxins stored in the tissues of their prey. "Methylmercury isn't easily excreted, so it stays. It suggests that there will be higher methylmercury concentrations in the fish humans eat as well," said Celia Chen, a professor at Dartmouth College and one of the study's six authors. In both lab and field experiments, the researchers observed small fish eating more food and storing higher concentrations of the toxin in their tissue when water temperatures were warmer. (*Washington Post/journal.pone.0058401*)

Climate Change to Cost East Asia 5.3% of GDP, Study Says

A recent study from the Asian Development Bank (ADB) found that climate change will lead to more flooding and drought in East Asia and could cut annual gross domestic product by 5.3 percent by the year 2100 if measures aren't adopted to tackle it. The report says that rising temperatures in China, Japan, Mongolia, and South Korea will spur more flooding and tropical storms in coastal areas and make northern agricultural regions more prone to drought. "East Asia needs to shift toward a model of economic growth focused on low carbon emissions and more efficient use of resources," the ADB said. The study underscores the risks of inaction on climate change faced by a region that was responsible for 30 percent of the world's carbon emissions in 2010. China's model of economic growth at all costs has made it the world's biggest carbon emitter and has blanketed cities in unhealthy levels of smog. The costs of mitigating climate change are much lower than the damage that would be caused by doing nothing, said Gordon Hughes, University of Edinburgh professor and one of the authors of the report. (Bloomberg)